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Application No: GB 9511232.2  
Claims searched: 1-10

Examiner: Melanie Jennings  
Date of search: 24 September 1996

**Patents Act 1977**  
**Search Report under Section 17**

**Databases searched:**

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.O): H4J(JCA, JCB, JDF, JDJ, JEB)

Int Cl (Ed.6): HO4R 9/00, 9/02, 9/04, 9/06, 9/08, 11/00, 11/02, 11/04

Other: Online: WPI, JAPIO, CLAIMS

**Documents considered to be relevant:**

Category	Identity of document and relevant passage	Relevant to claims
X	GB 2251355 A (ELECTRO ACOUSTIC)	1, 4
X	EP 0137550 A1 (PHILIPS)	1, 4
X	US 4897877 A (TETZLAFF)	1, 4
X	US 4612420 A (NIEUWENDIJK <i>et al</i> )	1, 4

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A Document indicating technological background and/or state of the art.  
P Document published on or after the declared priority date but before the filing date of this invention.  
E Patent document published on or after, but with priority date earlier than, the filing date of this application.

## INTERNATIONAL SEARCH REPORT

In International Application No  
PCT/IB 01/01084

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC 7 H04R25/00 H04R11/00		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols) IPC 7 H04R		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 617 653 A (TIBBETTS GEORGE C ET AL) 2 November 1971 (1971-11-02)	1-5, 9-15, 18-33
A	column 1, line 8-12 column 2, line 3-9  column 2, line 34-38 column 3, line 69 -column 5, line 9 column 5, line 43 -column 6, line 26 ---	6-8, 16, 17
Y	GB 2 301 728 A (KNOWLES ELECTRONICS CO) 11 December 1996 (1996-12-11)	1-5, 9-15, 18-33
A	page 1, line 2-4 page 1, line 20-24  page 3, line 12 -page 4, line 5 ---	6-8, 16, 17
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
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Date of the actual completion of the international search  18 September 2002		Date of mailing of the international search report  25/09/2002
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer  Zanti, P

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